Production Thereof and Uses in Specific Appropriate Serial No. 10/007,442

Attorney Docket No. 069686.0102

Inventors: Aminabhavi et al.

Filed December 2001

Sheet 1 of 7

1/7

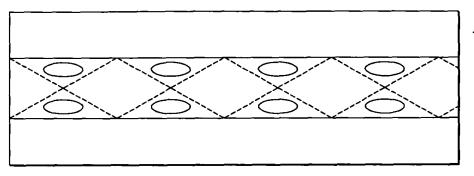


FIG. 1

$$FIG.$$
 2 { $CH_2-CH_4-CH_2CI_3-O_{n}[CH_2-CH_2N+(C_2H_4)3N_3-O_{m}]$

Ion Exchange Membranes, Methods and Processes for
Production Thereof and Uses in Specific Applications
Serial No. 10/007,442
Attorney Docket No. 069686.0102
Inventors: Aminabhavi et al.
Filed December 2001
Sheet 2 of 7

2/7

$$FIG. 5$$

$$-\text{CH}_2 - \text{CH}_{-} - \text{CH}_2 - \text{CH}_{-} - \text{CH}_2 - \text{CH}_{-} - \text{CH}_2 - \text{CH}_2$$

Ion Exchange Membranes, Methods and Processes for
Production Thereof and Uses in Specific Appliations
Serial No. 10/007,442
Attorney Docket No. 069686.0102
Inventors: Aminabhavi et al.
Filed December 5, 2001
Sheet 3 of 7

Ion Exchange Membranes, Methods and Processes for Production Thereof and Uses in Specific App ns Serial No. 10/007,442
Attorney Docket No. 069686.0102

Attorney Docket No. 069686.0102
Inventors: Aminabhavi et al.
Filed December 5 2001
Sheet 4 of 7

Ion Exchange Membranes, Methods and Processes for Production Thereof and Uses in Specific Appropriate Serial No. 10/007,442

Attorney Docket No. 069686.0102 Inventors: Aminabhavi et al. Filed December 2, 2001 Sheet 5 of 7

Ion Exchange Mernbranes, Methods and Processes for Production Thereof and Uses in Specific Appropriations Serial No. 10/007,442

Attorney Docket No. 069686.0102
Inventors: Aminabhavi et al.
Filed December 5 2001
Sheet 6 of 7

6/7

$$FIG. 9$$

$$- \begin{bmatrix} -\mathsf{CH}_2 & -\mathsf{CH}_3 \\ -\mathsf{CH}_3 & -\mathsf{CH}_3 \end{bmatrix}_{\mathsf{DH}} \xrightarrow{\mathsf{CH}_3 \mathsf{COOH}} - \begin{bmatrix} -\mathsf{CH}_2 & -\mathsf{CH}_3 \\ -\mathsf{CH}_3 & -\mathsf{CH}_3 \end{bmatrix}_{\mathsf{Br}} \cdots - \begin{bmatrix} -\mathsf{CH}_2 & -\mathsf{CH}_3 \\ -\mathsf{CH}_3 & -\mathsf{CH}_3 \end{bmatrix}_{\mathsf{OH}}$$

$$-\left\{-CH_{2}\right\}-CH_{2}\right\}-CH_{2}$$

$$-\left\{-CH_{2}\right\}-CH_{2}\right\}-CH_{2}$$

$$-\left\{-CH_{2}\right\}-CH_{2}\right\}-CH_{2}$$

$$-\left\{-CH_{2}\right\}-CH_{2}\right\}-CH_{2}$$

$$-\left\{-CH_{2}\right\}-CH_{2}\right\}-CH_{2}$$

Ion Exchange Membranes, Methods and Processes for Production Thereof and Uses in Specific Approach Serial No. 10/007,442

Attorney Docket No. 069686.0102
Inventors: Aminabhavi et al.
Filed December, 2001
Sheet 7 of 7

7/7

